Work Item Description

Transcoder Free Operation

1   **3GPP Work Area**

X	Radio Access
	Core Network
	Services

2   **Linked work items**

Out of band Transcoder Control (CN Work Item)

3   **Justification**

This WI is the complementary part of the WI that has been agreed for TSG CN. It shall provide more details for the Radio Access Network standardisation that is required for the Transcoder Free Operation.

4   **Objective**

- The number of transcoders to be installed in the core network can be minimised.
- The bandwidth to be provided in the core network may be reduced by TrFO or transcoder at the core network edge for both MS to MS calls and for MS from/to wireline calls.

5   **Service Aspects**

The service aspects for Transcoder Free Operation are:

- Usage of the framing protocol as defined in TS 25.415 in the Core Network needs to be supported

- Symmetrical set of RFCIs needs to be supported

- The behaviour of an RNC for receiving RFCIs at Iu UP initialisation from the core network shall be changed to be applied for both uplink and downlink.

- The mechanism to make the RFCIs available during TrFO Break needs to be supported (storage of RFCIs)

- Specific adaptations of the inband rate control procedure needs to be performed ("distributed – ", "maximum – ", and "immediate rate control")

- RNC behaviour on a RAB Assignment Request needs to be adopted for TrFO calls.

- 25.415 should in principle define the IuUP framing protocol in a way, that it covers its applicability for the Nb interface as well. This needs to be confirmed and co-ordinated with CN3.

6   **MMI-Aspects**

None

7   **Charging Aspects**

None

8   **Security Aspects**

None

9   **Impacts**

Affects:	USIM	ME	AN	CN	Others
Yes			X	X	
No	X	X			
Don't know					X

10   Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
23.153	Out of Band Transcoder Control - Stage 2	CN4	RAN3	TSG-CN#7	TSG-CN#10	

Affected existing specifications					
Spec No.	CR	Subject		Approved at plenary#	Comments
TS 25.401				TSG-RAN#11	
TS 25.410				TSG-RAN#11	
TS 25.413		see "Service Aspects"		TSG-RAN#11	
TS 25.415		see "Service Aspects"		TSG-RAN#11	

11   Work item rapporteurs

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12   Work item leadership

TSG-RAN3

13   Supporting Companies

14   Classification of the WI (if known)

	Feature (go to 14a)	
	Building Block (go to 14b)	
X	Work Task (go to 14c)	

14a   The WI is a Feature: List of building blocks under this feature

14b   The WI is a Building Block: parent Feature

14c   The WI is a Work Task: parent Building Block

Out of Band Transcoder Control